



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/635,382	08/06/2003	Donald Sheley Tracey	1999B062A	1278
23455 7590 10/03/2007 EXXONMOBIL CHEMICAL COMPANY 5200 BAYWAY DRIVE P.O. BOX 2149 BAYTOWN, TX 77522-2149			EXAMINER KNABLE, GEOFFREY L	
			ART UNIT 1733	PAPER NUMBER
			MAIL DATE 10/03/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/635,382	Applicant(s) TRACEY ET AL.	
	Examiner Geoffrey L. Knable	Art Unit 1733	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 July 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3, 5, 6, 8-18, 20, 21 and 23-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5, 6, 8-16, 20, 21, 23-30, 32 and 35-40 is/are rejected.
- 7) ☒ Claim(s) 17, 18, 31, 33 and 34 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 1733

1. In view of the significant amendments to the claims and to avoid unduly complicating the prosecution in this application, the previous election requirement is withdrawn and all current claims have been rejoined and examined.

2. Claim 10 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 10, lines 3-4, the information in the brackets at the end of the claim renders the claim indefinite and confusing.

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

4. Claims 10, 14, 32, and 38-40 are rejected under 35 U.S.C. 102(b) as being anticipated by WO 01/48033 to Tracey et al.

For the same reasons noted by applicant with respect to the parent application, WO '033 is considered to suggest inclusion of EPDM in the blends (esp. page 10, lines 8-1) (and thus most of the claims as amended are supported by the parent). Claims 10, 14 and 32 are not however supported as there is no clear description of a combination of butyl and chlorobutyl and claims 38-40 are not supported as there is no clear description of for example the recited star branched butyls. As such, WO '033 is available as prior art against these claims and is read to suggest butyl or halogenated butyl in the blend with the BIMS and thus anticipates these claims.

Note again that these claims are considered to lack descriptive support in the parent applicant and therefore are not entitled to benefit of this filing date. WO '033 is

Art Unit: 1733

therefore still available as prior art as it was published on July 5, 2001, this being more than one year prior to the August 6, 2003 filing date for this application.

5. Claims 1-3, 5, 6, 8, 9, 11-13, 15, 16, 20, 21, 23-30 and 35-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Costemalle et al. (US 5,333,662) taken in view of Elspass et al. (US 5,807,629) and at least one of [Morrissey (US 2,698,041), Baldwin et al. (US 2,964,489) and the excerpted portion of the Polymeric Materials Encyclopedia (pp. 3484-3492; previously cited by applicant)].

These references are applied herein for the same reasons as set forth in the last office action, it being again noted that Costemalle et al. '662 suggests it to be suitable and effective to blend other rubbers therein including EPDM (note col. 6, lines 28-44).

6. Claims 17, 18, 31, 33 and 34 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Similar claims 10, 14, 32 and 38-40 have not been indicated allowable given the applicability of WO '033 as noted above.

7. Applicant's arguments filed 7-5-2007 have been fully considered but they are not persuasive, at least as regards the remaining/new rejections.

The discussion with respect to the species election is moot as this requirement has been withdrawn and the claims rejoined as noted above. With respect to previous claim 31 reciting EPDM, it is agreed that the suggestion in the parent for addition of EP (i.e. EPDM) to improve processibility for both inner tubes comprising the BIMS elastomer and the blended composition provides sufficient descriptive support for the

Art Unit: 1733

present claims including EPDM in the blend. However, claims 10, 14, 32, and 38-40 are not supported and WO '033 is available as prior art against these claims as noted above.

The arguments with respect to the prior art rejection based on Costemalle '662 have also been carefully considered but are unpersuasive. With respect to the apparent argument that this reference does not teach EPDM, noted again that Costemalle et al. '662 suggests it to be suitable and effective to blend other rubbers therein *including EPDM* (note col. 6, lines 28-44). Further, reinforcing fillers are also clearly taught. The arguments with respect to Elspass are noted but again Elspass was applied principally merely as further evidence that the ordinary artisan, in addition to being considered to understand the similar functional requirements of inner tubes and innerliners and the common nature of employing butyl compounds for both, understands that similar compounds to those claimed have known use as both innerliners and inner tubes. In particular, it is again emphasized that, as is well known, the functional requirements for a tire inner liner and a tire inner tube are very similar, it being again considered to be very common to employ essentially the same compounds for both (typically butyl type compounds). To form an inner tube from the advantageous innerliner compositions of Costemalle would therefore have been obvious for the expected and predictable benefits of heat aging resistance, etc. As to arguments with respect to the halogen content, note again col. 1, lines 62-64 and col. 9, lines 15-21 of Costemalle et al. '662. As to the arguments with respect to use of at least 15 parts of the halogenated isobutylene copolymer in the blend, note col. 7, lines 62-68 of Costemalle et al. '662.

Art Unit: 1733

Applicant also stresses that there is no reasonable expectation of success of using an innerliner composition for inner tubes, especially in view of paragraph [0028] as well as paragraph [0003] in the specification, it being urged that innerliner compositions would desirably stick to the tire such being undesirable for tubes. It should however be noted that paragraph [0028] is describing problems if the bromination levels exceed the noted range of 0.1 to 3.0 mol percent - levels consistent with the desirable range are however suggested by Costemalle '662 (e.g. col. 9, lines 15-21) and thus following the teachings of this reference would not seem to necessarily raise the noted issues. Further, the discussion in paragraph [0003] is describing the problems with heat aging of typical butyl compounds - this however is precisely why the prior art suggest the inclusion of BIMS/EXXPRO - to provide expected improvement in heat aging, this therefore strongly motivating the artisan to use such, particularly as they are apparently aware of the heat aging problems present for inner tubes. Note also again the secondary references further evidence that the ordinary artisan understands that the functional requirements for a tire inner liner and a tire inner tube (as well as bladders) are very similar, it being well known to employ essentially the same compounds for either for only the expected results. It therefore is reasonable to expect the recited innerliner compositions to predictably and suitably function as inner tubes (as long as of course they are separately vulcanized as of course being typical).

8. Applicant's amendment necessitated the new ground(s) of rejection (i.e. the new 102 rejection in place of the previous 103 rejection over WO '033) presented in this

Art Unit: 1733

Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).


Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Geoffrey L. Knable whose telephone number is 571-272-1220. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on 571-272-1226. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Geoffrey L. Knable
Primary Examiner
Art Unit 1733

G. Knable
10/1/07